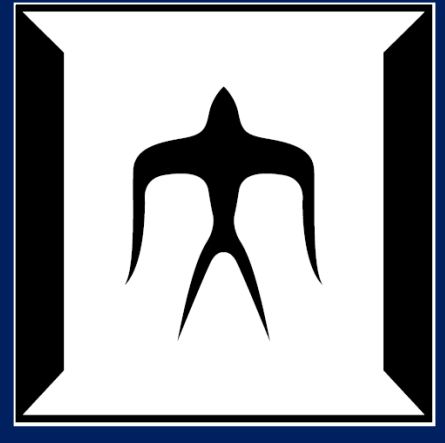


Ni-P/PET Fiber Prepared by Supercritical CO₂ Catalyzation for Wearable Device Applications



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Introduction

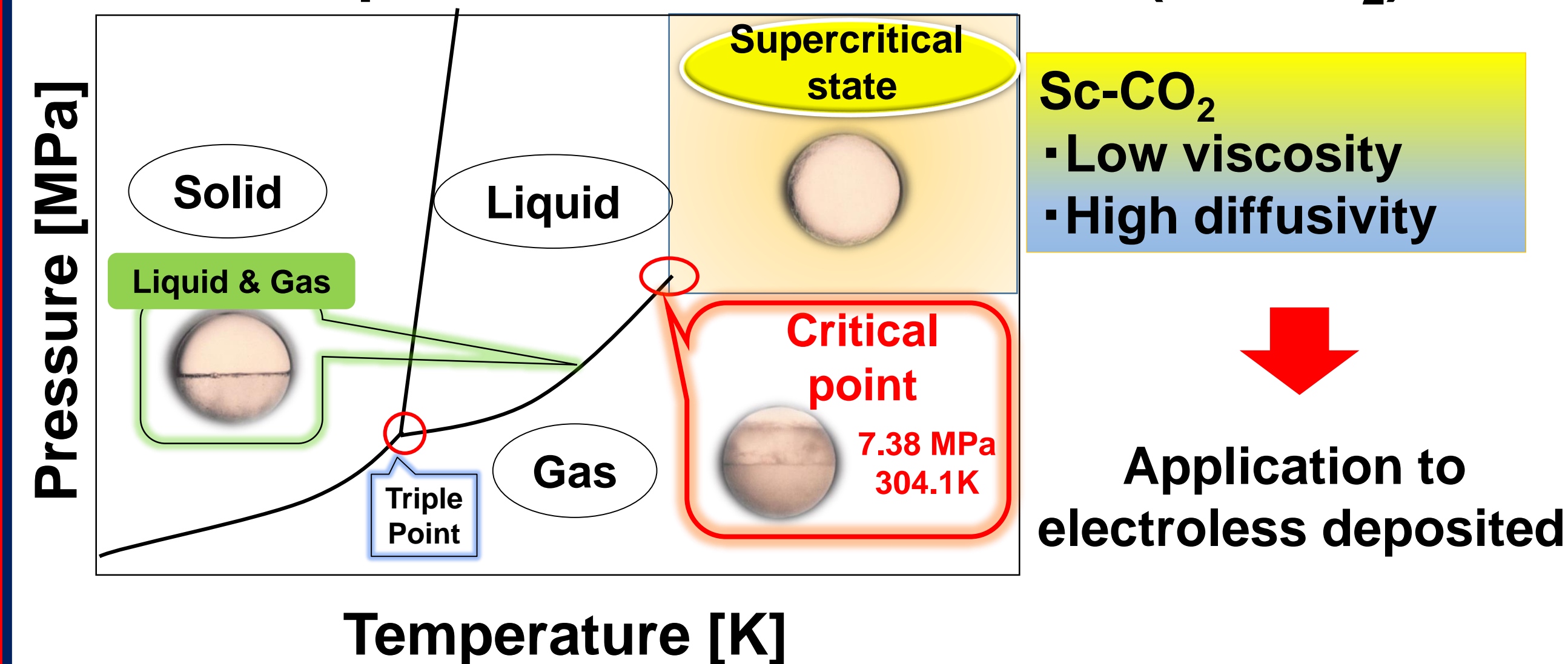
Wearable Device for medical purpose



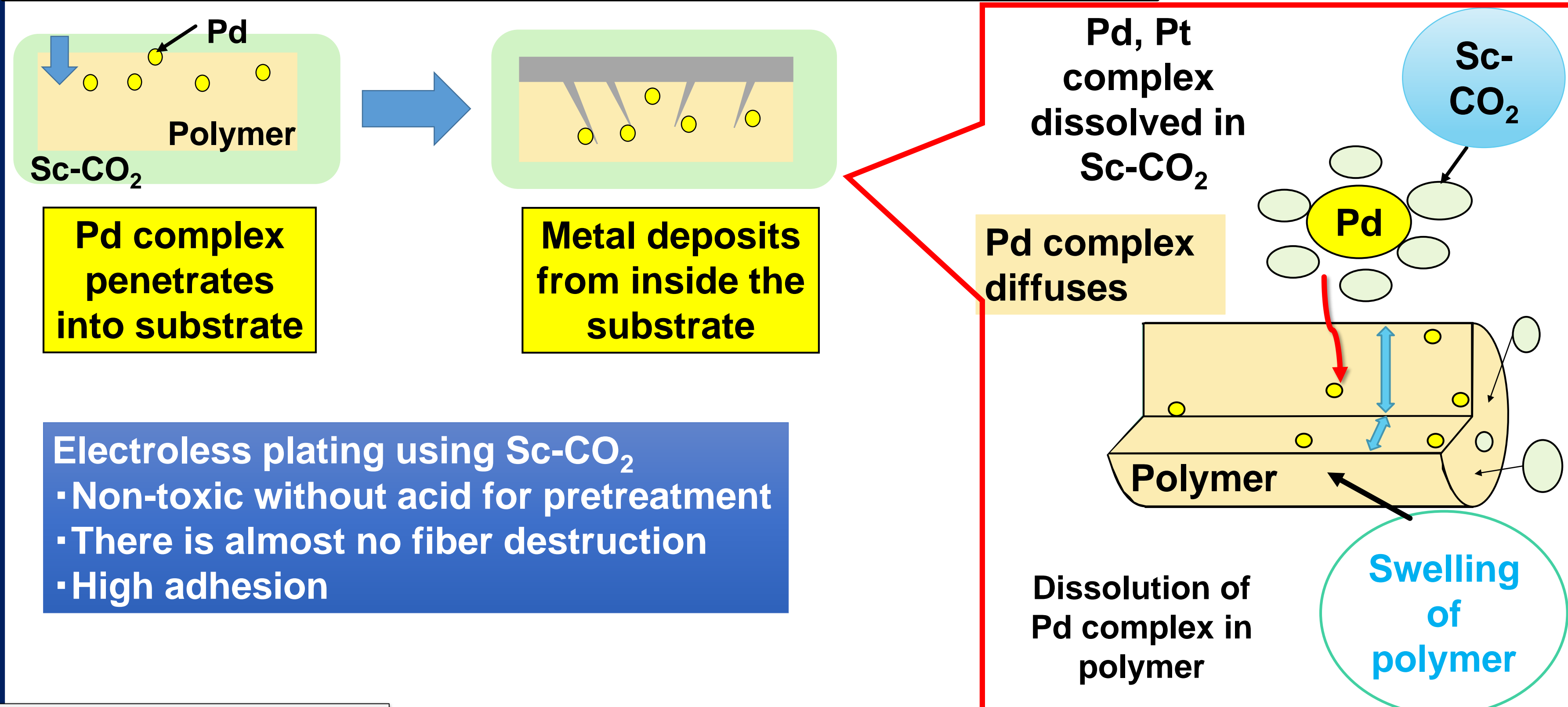
- Breathing
- Electro-cardiogram
- Heart Pulse

Requirements : Adhesion of metal thin film to fiber

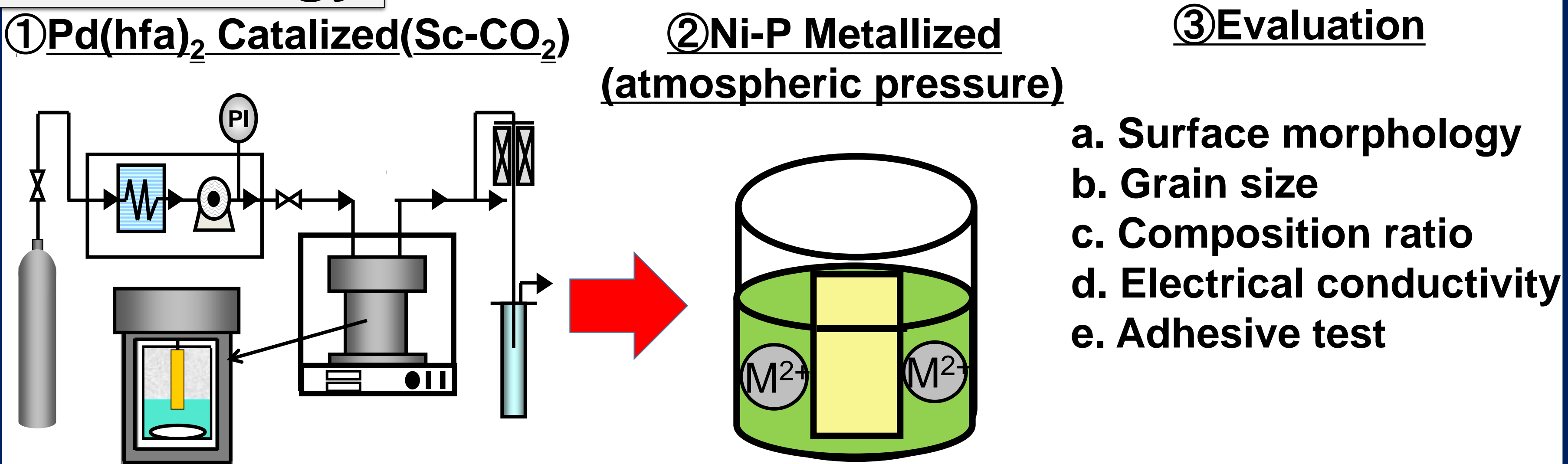
Supercritical carbon dioxide(Sc-CO₂)



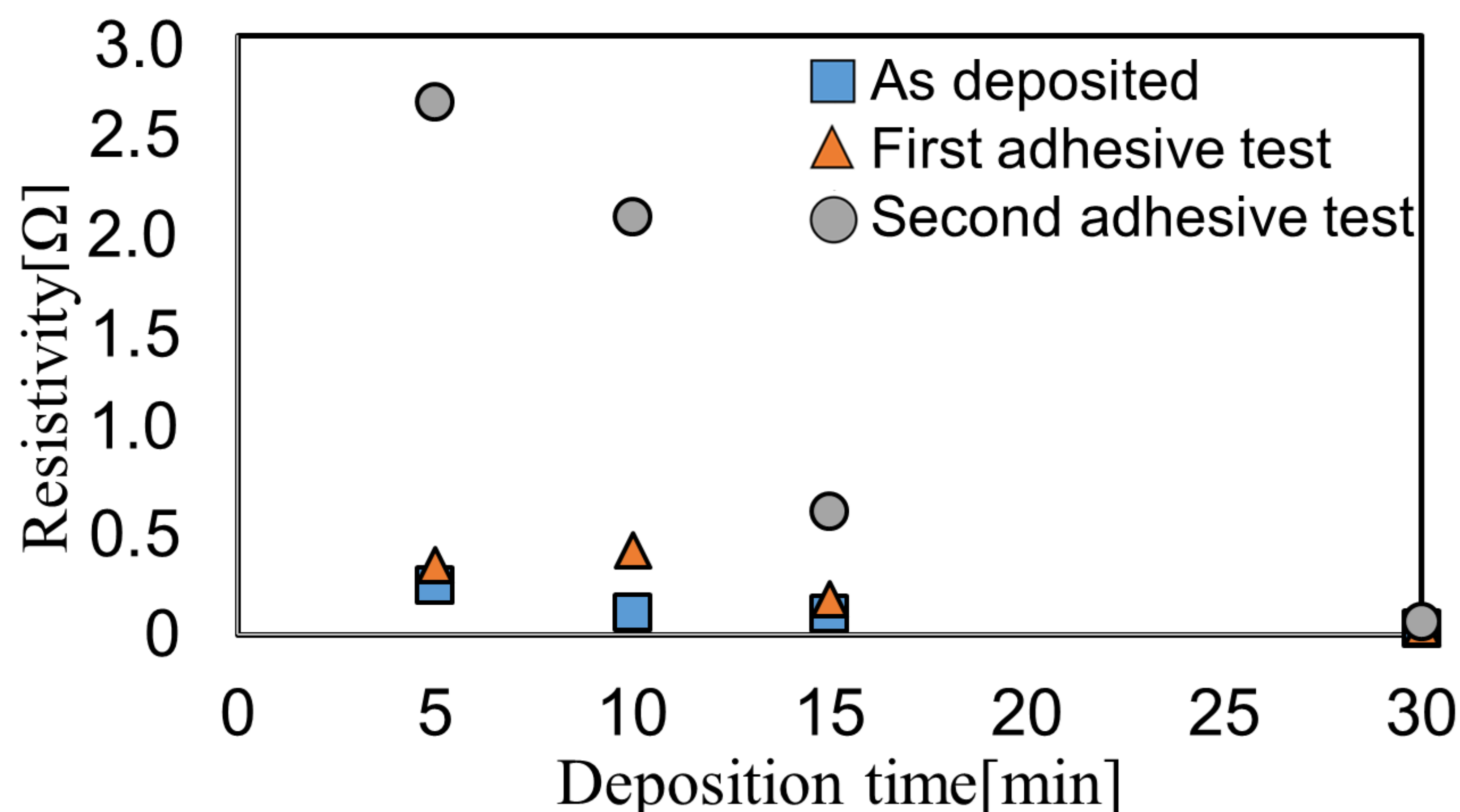
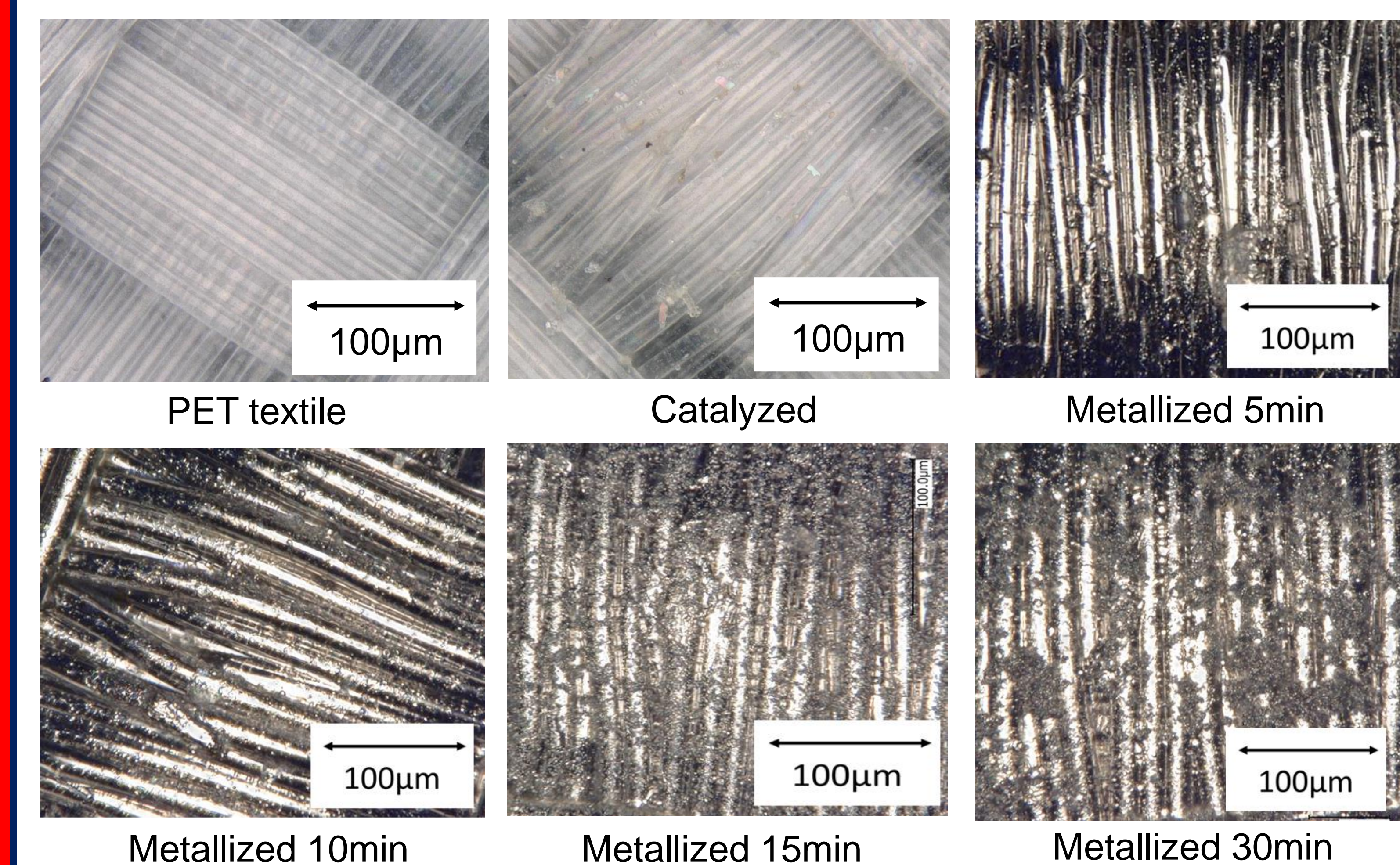
Advantages of electroless deposited using Sc-CO₂



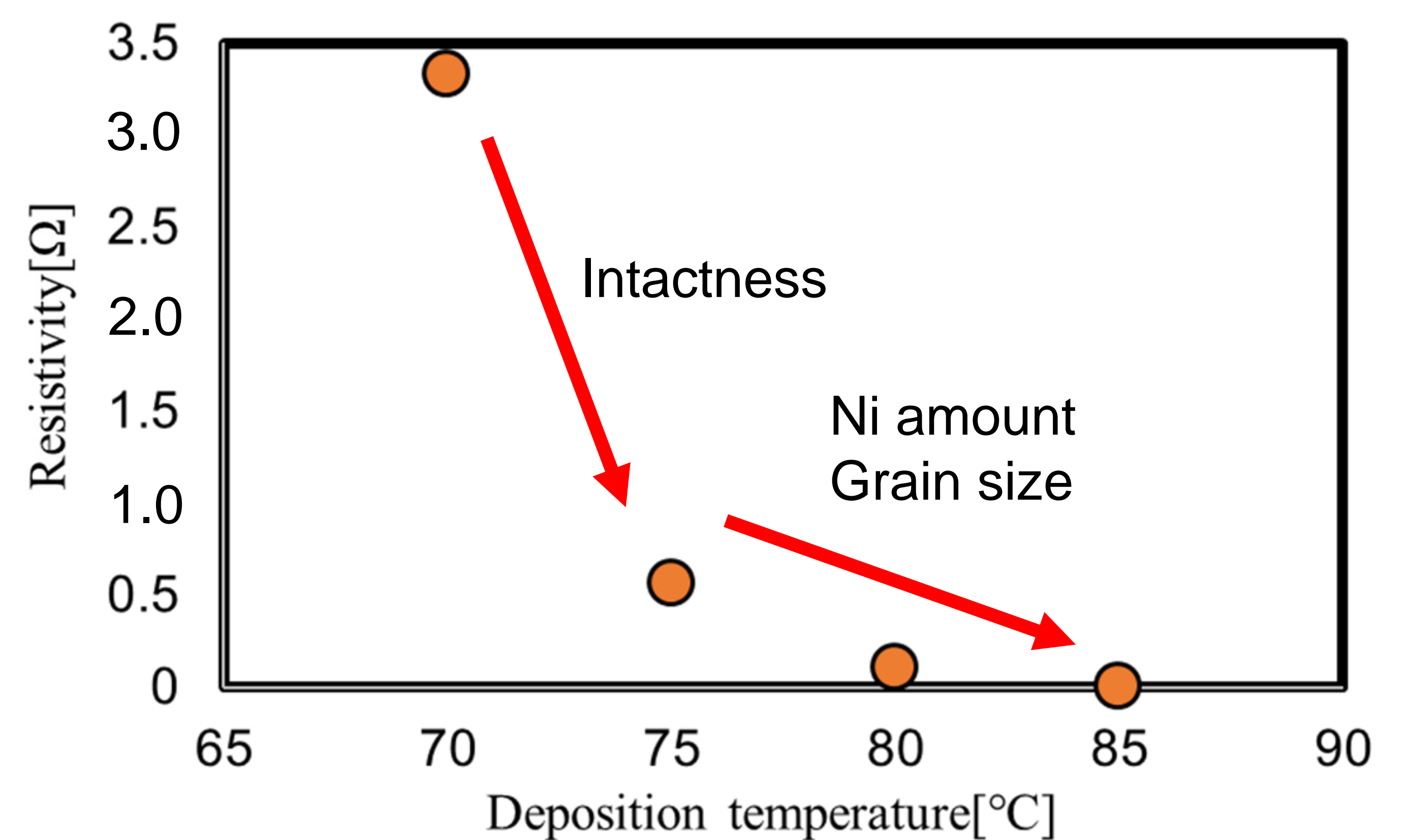
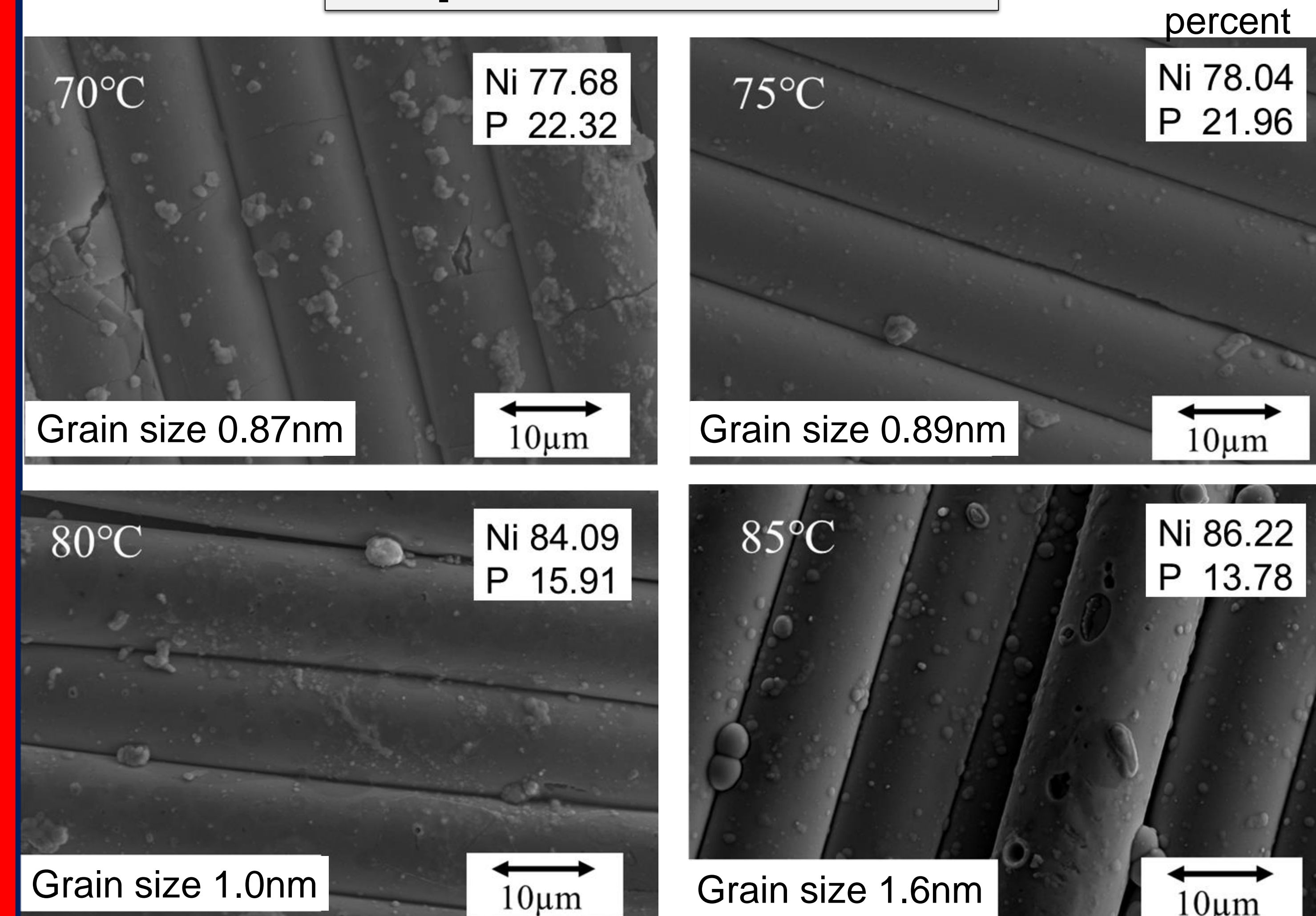
Methodology



Deposition temperature 80°C



Deposition time 5min



Conclusions

- The longer the deposition time, the larger the particle size and the Ni composition.
- The electrical resistance decreased as the deposition time increased.
- The adhesion increased as the deposition time increased.

Acknowledgement

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